MUNICIPALITY OF CROWSNEST PASS
BYLAW NO. 867, 2013

A BYLAW OF THE CROWSNEST PASS, IN THE PROVINCE OF ALBERTA, TO ADOPT A THE NORTH COLEMAN AREA STRUCTURE PLAN.

WHEREAS The Municipality of Crowsnest Pass wishes to establish a reference point for future land use and servicing for the North Coleman area;

AND WHEREAS The Council wishes to adopt a plan which identifies land use and servicing strategies for the North Coleman area;

AND WHEREAS The purpose of Bylaw No. 867, 2013 is to adopt an area structure plan which will establish development policies and guidelines and servicing strategies for the area of land within the Municipality as illustrated in Figure 1 within the area structure plan document;

THEREFORE Under the authority and subject to the provisions the Municipal Government Act, the Council of the Municipality of Crowsnest Pass, in the Province of Alberta, enacts as follows:

1. Council shall adopt the North Coleman Area Structure Plan
2. This plan, upon adoption, shall be known as the North Coleman Area Structure Plan.
3. This Bylaw comes into effect upon third and final reading hereof.

READ a first time this 2nd day of April, 2013.

CARRIED UNANIMOUSLY

READ a second time this 16th day of April, 2013.

CARRIED UNANIMOUSLY

READ a third time and finally passed this 16th day of April, 2013.

CARRIED UNANIMOUSLY

B. V. Decoux

Bruce Decoux
Mayor

Myron Thompson

North Coleman Area Structure Plan

Final Report

March 18, 2013

Sign-off Sheet

Stantec

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Prepared by _____
(signature)

Felix Michna, MCIP, RPP

Prepared by _____
(signature)

Chris Poirier, BA, CET

Reviewed by _____
(signature)

Don Waite, PE, P.Eng.

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1.0 OVERVIEW

1.1 PLAN PURPOSE AND OBJECTIVES

In recognition of recent growth and interest in developing in the region, the Municipality of Crowsnest Pass (MCNP) has directed the completion of an Area Structure Plan (ASP) in the northern portion of the community of Coleman. The ASP establishes a reference point from which future land use and servicing decisions can be made to help ensure orderly and economic development in the study area.

At the conceptual level, it identifies potential land uses and servicing extensions and provides a general policy framework for land use re-classification, subdivision and development within the Plan area.

The ASP addresses the following matters:

- **Servicing / Public Utilities**

  The servicing component of this report reviews the existing water and wastewater services and
  identifies a servicing strategy for properties that have been developed but are presently without piped services as well as properties with the potential to develop in the near future.

- **General Location of Major Roadways**

  This ASP proposes locations of potential local and collector roadways in currently undeveloped areas as well as developed areas.

- **Potential Land Uses**

  The study area is comprised of properties that have (a) approved Area Structure Plans, (b) partially developed grouped country residential parcels and (c) lands that are largely undeveloped. This ASP reviews the land uses, the environmental concerns, historical perspectives and the constraints to development as well as the zoning and existing

planning documents to assess the full development potential of the properties falling under the description of 'b' and 'c' above.

The ASP also establishes development policies and guidelines for new proposals for subdivision and development in the study area. These are intended to help ensure (a) compatibility and integration with existing developments, and (b) that new land development and servicing proposals are of mutual benefit to the municipality and the development sector.

- **Density of Population and Sequence of Development**

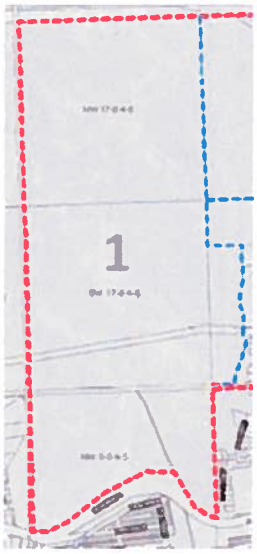
Where new land uses are proposed and where further subdivision is possible, population densities are recommended and a general sequencing of potential development is proposed. Development sequence recommendations reflect the importance of ensuring that community growth is in harmony with the financial capabilities of the community.

1.2 PLAN AREA

The ASP area, outlined in **Figure 1**, encompasses approximately 643 ha (1588 acres). For study and focus purposes, the area has been compartmentalized into Sub-Areas 1 through 8, each of which is characterized by its own unique features and attributes. These Sub-Areas are also identified in **Figure 1**. For each Sub-Area, the ownership of the developable land as well as the affected stakeholders has been identified.

1.2.1 SUB-AREA 1 (NW 17-8-4-5, SW 17-8-4-5, NW 8-8-4-5)

Ownership: McGillivray Land Development Corp. (MLDC)



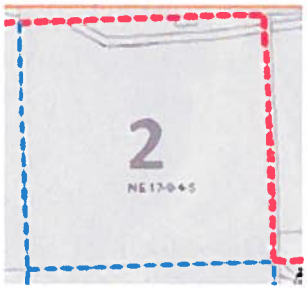
This Sub-Area comprises approximately 177 ha (438 acres). The Nez Perce Area Structure Plan was approved for these properties in August 2003. MLDC was the original applicant for the Area Structure Plan and continues to hold the properties.

The municipality's Land Use Bylaw presently designates the lands as "Non-Urban Area". No development has occurred to date. The property is largely wooded and is characterized by predominantly gentle topography (0-12.5% grades) with some areas of steep topography (> 25%) near its northern, western and southern boundaries.

The Alta-Link transmission line traverses the southern portion of the site.

1.2.2 SUB-AREA 2 (NE 17-8-4-5)

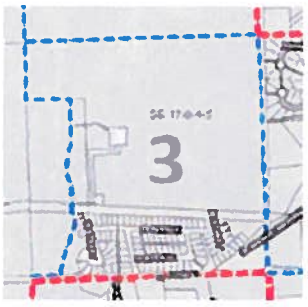
Ownership: McGillivray Land Development Corp. (MLDC)



This undeveloped quarter section (NE 17-8-4-5) is also under the ownership of the McGillivray Land Development Corporation. Save for a small area in the southwest corner of this quarter, this parcel is characterized by very steep topography. Its potential for urban type uses remains very limited. The present zoning category is "Non-Urban Area".

1.2.3 SUB-AREA 3 (SE 17-8-4-5)

Ownership: Environment and Sustainable Resource Development (ESRD)



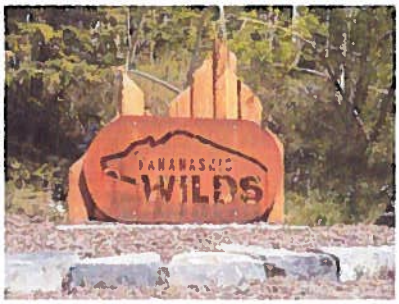
This area includes an established residential neighborhood (Pineview) and Crown Land. It is undeveloped north of the AltaLink power line except for the municipal reservoir and service road. It has significant wood cover, a major ravine on the west end of the property and steep slopes in the northern sector of the parcel. The Crown Land presently has a "protective notation" applied to it. This "notation" represents a form of reservation on the land. In this instance the reservation relates to *rough fescue grassland*, a native grass that is becoming endangered.

The Land Use Bylaw designates the Crown Land as "Non-Urban Area" with the land south of the transmission line categorized as "R-1 Residential". The three ranges of topography identified in **Figure 6** are equally represented in the undeveloped area.

1.2.4 SUB-AREA 4 (SW 16-8-4-5)

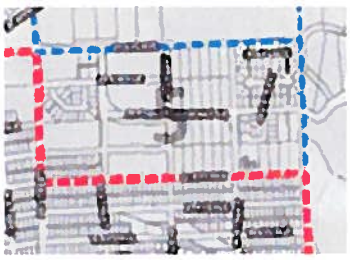
Ownership: Douglas J. Bergen & Associates Ltd., Ralph Tiegen

Sub-Area 4 is served by Hwy 40. It is currently developed for grouped country residential and urban residential uses. The 77 parcels of the Kananaskis Wilds project are generally 1/3 acre in size while larger grouped country parcels are located to the south. The Sawback Ridge Area Structure Plan proposes grouped country residential parcels in the eastern sector of this Sub-Area. An electrical substation is located along the south boundary of this Sub-Area (27th Avenue). The Grouped Country Residential (GCR-1) and Residential (R-1 and R-1A) zoning districts apply to these properties. The topography of the undeveloped area is a mix of gentle (0-12.5%) to moderate (12.5-24.9%) with a small portion comprised of steep (>25%) terrain.



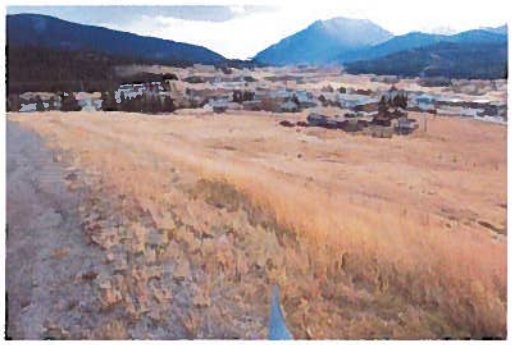
1.2.5 SUB-AREA 5 (N ½ NW 9-8-4-5)

Ownership: Remus, Townsend, Bradbury, Vare, JJ Pipeline Services & Consulting Ltd., MCNP, Cooke, Edge, Pentecostal Assemblies of Canada, Valley View Motel



This Sub-Area is served by Hwy 40. It is principally zoned for residential uses – including mobile homes, a multi-family site (apartment building) and 2 parcels zoned for retail commercial use. The neighborhood of Campbell heights and the future neighborhood of Sunny View Estates are located in this Sub-Area. Several of the residential blocks remain un-subdivided while others have been parceled into large lots (e.g. between 22nd and 27th Ave and 85th and 86th streets).

The topography of the undeveloped area is primarily gentle (0-12.5%) with some moderate (12.5-24.9%) and a small portion with steep (>25%) slopes. Some re-subdivision has been occurring (e.g. east of 86th St and north of 24th Ave.). However for the most part no significant housing development has been taking place in this Sub-Area and several road allowances remain undeveloped. In some cases, this is due primarily to topographical limitations.



1.2.6 SUB-AREA 6 (SE 16-8-4-5, NE 9-8-4-5, PORTION OF SE 9-8-4-5)

Ownership: *Capron, MCNP, Botha, Gunn, Zverina, International Geological Consultants Ltd., Bradley, Florence*

Sub-Area 6 contains a mix of grouped country residential parcels and more intensive urban uses. The northern portion of this Sub-Area is characterized principally by country residential uses (Capron Estates, Aspen Creek).

The southern part of Sub-Area 6 is similarly dominated by grouped country residential development. The "Wood Haven" country residential subdivision which forms the largest portion of this part of Sub-Area 6 is mostly served by a municipal water system. The area south of "Wood Haven" contains the Crowsnest Consolidated High School and the municipality's Recreation complex. The multi-family residential housing development (Ironstone) is located adjacent to Highway 3. This urbanized sector of Sub-Area 6 is serviced with water and wastewater facilities and offers opportunity for further expansion.

The topography of the undeveloped area is primarily gentle (0-12.5%) accompanied by an equal mix of moderate (12.5-24.9%) and steep (>25%) slopes.

1.2.7 SUB-AREA 7 (PORTION OF NW 10-8-4-5)

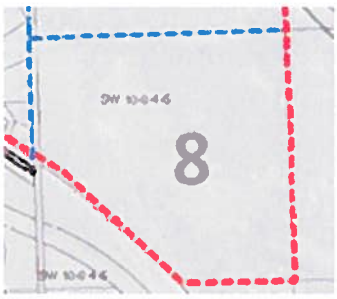
Ownership: *Devon Canada Corporation*

This area is heavily wooded and undeveloped. The AltaLink transmission line traverses the northeast sector of this quarter section and forms one of the boundaries of the ASP study area. Presently under the ownership of energy company Devon Canada Ltd., there is no known interest at this time from the present owners to pursue any form of residential development. The parcel forms part of an extensive ownership of parcels that are intended to be used for resource development and were for sale at time of preparation of this document.

The topography of the undeveloped area is an equal mix of gentle (0-12.5%), moderate (12.5-24.9%) and steep (>25%) terrain.

1.2.8 SUB-AREA 8 (PORTION OF SW 10-8-4-5)

Ownership: Terry Kenny



Sub-Area 8 is a partially wooded area zoned "NUA-1, Non-Urban Area" containing some steep slopes in the northwest and in the southern portion of the site. The area is presently not serviced by municipal water or wastewater lines although a major water line is located adjacent to Highway 3 along the south boundary of the Sub-Area. With the exception of a residence, this area is not developed. The proximity to the Highway however, could present possible opportunities for some urban development. The property owner is currently exploring these opportunities.

The topography of the undeveloped area is primarily gentle (0-12.5%) followed by moderate (12.5-24.9%) with some steep (>25%) terrain. Grades increase from east to west.

1.3 LEGISLATIVE CONTEXT

The North Coleman Area Structure Plan has been prepared as a statutory document in accord with Section 633 (1) of the Municipal Government Act, RSA 2000, Chapter M-26. As set out in Section 633(2) of the Act, this Plan describes:

(i) the sequence of development proposed for the area,
(ii) the land uses proposed for the area, either generally or with respect to specific parts of the area.
(iii) the density of population proposed for this area either generally or with respect to specific parts of the area, and
(iv) the general location of major transportation routes and public utilities and
(iv) *any other matters the Council considers necessary*

1.4 STAKEHOLDER AND COMMUNITY CONSULTATION

1.4.1 STAKEHOLDERS

Consultation with the stakeholders took place during a series of meetings and interviews that occurred between September 7 and 28th 2012 and on October 17th. The stakeholder group was comprised principally of the major property owners and developers in the study area. Alberta Transportation (AT), the Oldman River Regional Services Commission (ORRSC), Alberta Environment and Sustainable Resource Development (AESRD) and key members of the administration were also consulted on the Plan. Among the key points raised by the stakeholders:

- The general economy of the area and the attraction of low housing prices in the U.S. appear to be affecting interest in the housing market and the ability to sell lots.
- There may be an oversupply of residential lots in the Crowsnest Pass.
- Some residential developers are exploring other use possibilities: ones that have more market appeal
- Certain types of developments e.g. The "Ironstone" townhouse project, are finding a good market.
- There is a need to review the standards relating to offsite service payment. This appears to be creating a disincentive for developers.
- There is concern over the potential/pending rerouting of Highway 3 and its impact on the businesses and services in the Coleman area.
- Conditions of subdivision and development have not been completed for certain residential projects. There is a need to resolve the outstanding issues that are still associated with such projects in order to ensure their finalization.

At the sub-division stage when detailed development plans are known, and depending on where development is proposed to occur in the study area, consideration should be given to additional consultation with AltaLink, Trans Canada Pipelines, Crowsnest Pass School Division No. 63, Servus Credit Union and adjacent residents.

1.4.2 COMMUNITY CONSULTATION

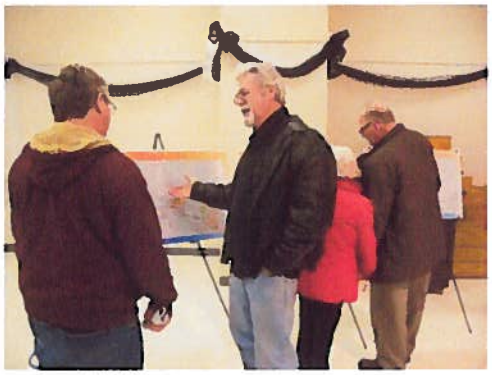
An Open House was held on the evening of Monday, February 11, 2013 at the Elk's Hall in Blairmore. This event offered an opportunity for the public to comment on the draft version of the North Coleman ASP along with the Carbondale Servicing Study and number of municipal projects.

Attendees were able to view an ongoing slide presentation featuring the highlights of the ASP and the related storyboards, as well as to peruse complete and summary versions of the draft document.

Subsequent to the Open House an ftp site was made available to the municipality to allow the public to view the draft plan and submit suggestions. Comment sheets were provided at the Open House to capture any suggestions for the Plan, while 3 staff from the Stantec office were in attendance to respond to questions. An estimated 85 people visited the Open House.

Responses to the ASP were positive. The nature of the public's inquiries related to clarification and explanation of general concepts in the Plan. Three specific comments were noted and have been incorporated in the Plan:

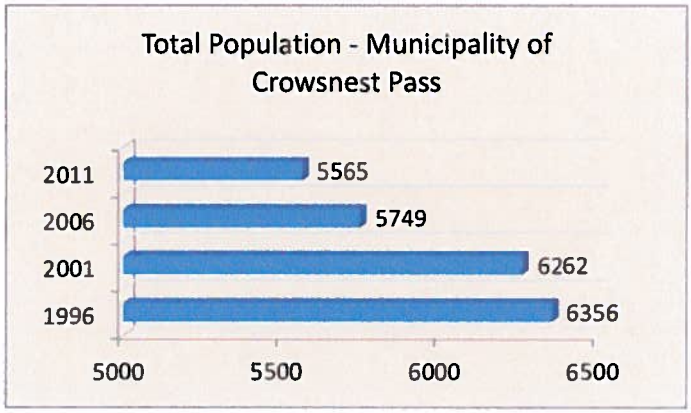
- A suggestion for possible higher density opportunities in the southern portion of the existing Nez Perce ASP
- Clarification on how water will be accessed in parts of Sub area 8
- Consideration to assessing whether additional development opportunities are possible on the lands where the municipal Arena/Curling Rink are sited.



2.0 EXISTING CONDITIONS AND TRENDS

2.1 POPULATION

The Municipality of Crowsnest Pass has seen a slow but steady decline in population over the last 30 years. The population has decreased from 7302 residents in 1981 to 5565 in 2011. A significant factor that has contributed to this decline has been the heavy reliance on the coal industry as the community's economic engine. This became all too clear with the closure of the Coleman Collieries in 1984.



Given the vagaries of the economy, it would be unreasonable to assume that this trend will continue. Indeed the community's Municipal Development Plan of 2001 has noted the difficulty of making accurate growth projections given "the 'boom and bust' nature of the economy". The impact of this continuing population loss nonetheless has an impact on the potential for new residential and related service and business development. The present economic reality may necessitate a re-examination of how the municipality views new development and how the municipality's resources should be directed in dealing with new development.

Section 4.2 (Concept Plan and Servicing Strategy) includes a discussion on population densities[1] for each of the sub areas.

2.2 PROPERTY OWNERSHIP

Figure 2 illustrates the principal property owners in the study area. Although only certain properties have been identified here, the study's focus is on sites that (a) are significant by virtue of their size or (b) are recommended for potential land-use change as a result of the servicing and land use strategy set out in this report.

[1] Persons per household based on Alberta 2011 Census data "household size". Single Family = 2.9, Row House = 2.4, Apt. Duplex = 2.2, Apt. with < 5 stories = 1.7 (Census of Canada 2010, Census Household Type, Alberta)

2.3 EXISTING POLICY, PLANS AND STUDY DOCUMENTS

Key documents prepared for the municipality served as background for this study and were reviewed. These include the following:

2.3.1 MUNICIPAL DEVELOPMENT PLAN

Bylaw No.556, the Municipal Development Plan for the Municipality of Crowsnest Pass was adopted in 2001. The Plan and its companion *Background Report* identify several key points that are relevant to the ASP.

Among these are:

- Identification of potential areas for expansion for residential use (SE ¼ Sec. 17-8-4-W5M) – (Crown Lands); and SW ¼ Sec. 17-8-4-W5M and NW ¼ 8-8-4-W5M (McGillivray Land Development Corp.) (P.64, "Potential Future Growth Areas", *Background Report*)

- "Land Areas with steep or precipitous slopes of 25% or greater, should, in most cases be avoided for future development". (P.64, "Development of Potential Land", *Background Report*)

- "Higher density urban development should be located in areas that are within reasonable proximity to existing municipal infrastructure such as existing pipelines and water treatment facilities to lower the costs associated with installing lengthy amounts of pipelines to a new area" (P.64, "Development of Potential Land", *Background Report*)

- Portions of the study area (NW ¼ Sec. 8-8-4-W5M, NE ¼ Sec. 8-8-4-W5M, and Sec. 17-8-4-W5M) are identified as "...locations of previous surface and underground mining activity to the nearest quarter section" (P.67, "Coal Mining Considerations", *Background Report*)

- The municipality requires additional forms of housing to accommodate seniors, low income families, renters, etc., as over 90 per cent of the housing in the pass is classified as single detached dwellings" (P.71 , *Background Report*)

- The major emphasis for residential development over the last decade has been for country residential use and the creation of higher-density urban residential development has not kept pace" (P.71, *Background Report*)

- "The municipality's highway commercial acreage is slightly lower than other municipalities and there is very little land available to accommodate this type of land use activity..." (P.72, *Background Report*)

- "The minimum parcel size of Country Residential parcels shall be what is stipulated in the Land Use Bylaw. Smaller than three acre parcels may be approved if the water source and sewage treatment facility is through conventional municipal means (Policy 8.1, P.29, Municipal Development Plan)

- The percentage of single detached dwellings in the Crowsnest Pass (90.6%) is second only to Magrath (92.9%) with other Alberta communities falling into the 76.2% - 87.3% range. This could be interpreted as justification for increasing the supply of multi-family dwellings.

2.3.2 LAND USE BYLAW NO. 623-2004

The Municipality's principal land use regulatory instrument is Land *Use Bylaw No. 623-2004*. The present Bylaw was adapted in 2004 and is currently being updated with a new version anticipated sometime in early 2013. **Figure 3** illustrates the Land Use Districts in the study area.

The majority of the undeveloped land area is designated as NUA-1 (Non-Urban Area), and in at least one case, lands with an approved Area Structure Plan (Nez Perce ASP) retains this zoning category. Most of the developed areas are segmented into various residential categories: R-1 and R-1A, (Residential), R-2 (Duplex Residential), R-2A and R-3 (Multiple Residential), R-4 (Mobile Home) and GCR-1 (Grouped Country Residential). The high school site and substation are zoned P-1 (Public) with the several park and recreation sites – including the municipal sports complex – categorized RO-1 (Recreation and Open Space). Two retail commercial (C-1) and a Drive-In Commercial (C-2) are also found identified in the study area.

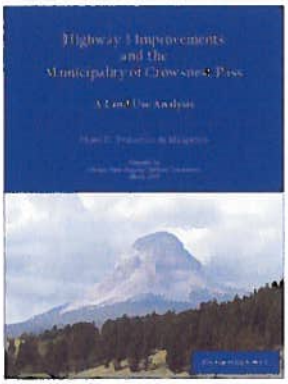
2.3.3 AREA STRUCTURE PLANS

Four Area Structure Plans to accommodate grouped country residential as well as other residential uses have been identified in the study area. Two have proceeded to construction (Kananaskis Wilds and Aspen Creek), two have not (Nez Perce and Sawback Ridge). Evidence of ASP approval was found for all but Aspen Creek. These ASPs have been referenced in Section 1.2 and are noted in **Figure 4**.

2.3.4 HIGHWAY 3 IMPROVEMENTS AND THE MUNICIPALITY OF CROWSNEST PASS – LAND USE ANALYSIS

This document, (subtitled, "Phase II: Evaluation and Mitigation") prepared by the Oldman River Regional Services Commission in March 2005 complements the "Highway 3 Functional Planning

Study" carried out by McElhanney Consulting Services Ltd. for Alberta Transportation. The document explores the consequences of the proposed re-routing of Highway 3 through the Crowsnest Pass.



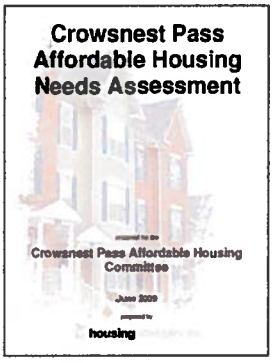
The latest re-alignment being proposed for Highway 3 (3X), if constructed, would bypass Coleman entirely (**see Appendix A**). According to discussions with Alberta Transportation in December 2012, the location of the likely interchange where the existing alignment will depart to the south of Coleman is approximately 100 m west of the Tim Horton's in west Blairmore. The alignment shown in Appendix A is from Alberta Transportation's internal GIS (TIMS).

At the time of preparation of this document, Alberta Transportation has indicated that interim improvements are a possibility prior to a complete re-alignment. These would involve 4-laning the existing alignment with the possible addition of traffic signals.

If constructed as presently proposed, the new "Highway 3X" alignment will ultimately be a 4-lane facility. These 4-lanes may be staged over time. The new alignment will have an impact on Coleman in general, and the study area in particular. Although these are beyond the scope of this Study, a number of issues should be addressed in considering the impact of the Highway re-alignment:

- The timing of the project in order that potential business developers can assess the feasibility of pursuing projects.
- The location and types of accesses in Sub-Area 8 in order that properties best able to accommodate commercial/business uses, can incorporate the most suitable accesses.

2.3.5 HOUSING NEEDS ASSESSMENT



The *Crowsnest Pass Affordable Housing Needs Assessment,* (March 2009) prepared for the Crowsnest Pass Affordable Housing Committee provided an overview of the housing situation in the Crowsnest Pass. While this report focused on affordable housing needs in the community, it offered a number of points that are relevant to this Study:

1. Between the census years 1996-2006:

   i) "Empty- Nesters (ages 55-64) increased by 50.8 %
   ii) Older seniors (ages 75 and over) increased by 20.6%

2. The Crowsnest Pass has a significantly higher percentage of single detached homes than the province as a whole, but significantly lower percentages of all other dwelling types than the province as a whole.
3. Since 1996 the total number of rental units in the community has declined by 24.6% - a loss of approximately 125 homes available to renters.

Although these figures do not provide a thorough picture of demand for housing types, they suggest that certain markets are worth further investigation. Some recent housing developments in the study area (e.g. The *Ironstone* multifamily project) have seen the opportunities offered by these markets and pursued them.

2.3.6 2008 WASTEWATER COLLECTION SYSTEM MASTER PLAN

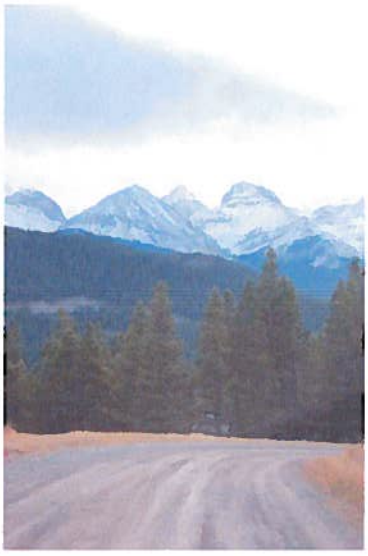
This Plan was reviewed to determine if additional development in the study area could be accommodated. The review concluded that capacity of the Coleman Sub-Trunk Improvements (currently proposed for 2016) as proposed in the Master Plan is capable of meeting the needs of existing areas as well as those of potential new growth sites. Section 3 – Water and Waste Water Infrastructure discusses this in more detail.

2.3.7 2008 WATER DISTRIBUTION SYSTEM MASTER PLAN

This plan was reviewed to ensure that servicing recommendations and growth assumptions were in harmony with previous recommendations. Section 3 – Water and Waste Water Infrastructure discusses this in more detail.

2.3.8 2007 TEN YEAR INFRASTRUCTURE PLAN

This plan was reviewed to ensure that servicing recommendations and growth assumptions were in harmony with previous recommendations. Section 3 – Water and Waste Water Infrastructure discusses this in more detail.



2.4 PHYSICAL, HISTORICAL, ENVIRONMENTAL

2.4.1 TOPOGRAPHY

Figure 6 illustrates the general topography of the study area. As noted earlier, there is a wide variation in topographic relief throughout the region. This physical environment offers both opportunities and constraints to development. The present policies of the Municipal Development Plan suggest that areas with slopes in excess of 25%, "should, in most cases be avoided".

2.4.2 CREEKS, SENSITIVE AREAS, HISTORICAL FEATURES

Figure 5 defines a number of environmentally sensitive sites and a historical feature that are found within the Study area. These include a number of watercourses and the historically significant Coal Miner's Trail. Maintained by the Coleman Lion's Club as a recreational walking pathway, the Miner's Trail was used by Coleman miners on their way to the former McGillivray Mine that operated between 1909 and 1957. A portion of the trail follows the Nez Perce Creek ultimately leading to the old mine site.

A number of sites related to mining activities in this area of the Crowsnest Pass have been noted by Alberta Historic Sites Inventory, including entrances to mines. Planning at the detailed level should ensure that these sites are identified and measures taken to ensure their protection from inappropriate development. Geotechnical studies should also be carried out at or near mine sites to confirm suitability for development.

3.0 TRANSPORTATION AND WATER/WASTEWATER SERVICING

A conceptual water and wastewater servicing strategy was developed for the study area. The system concepts are shown in **Figure 8**. In addition to potential utility expansions, long term investment in road improvements is suggested as depicted in **Figure 9**. Improvements to the roadways would result in more direct access to and from the area and support future subdivision.

This potential future infrastructure represents a combination of services proposed within existing ASPs as well as plausible service extensions identified by Stantec. These plausible service extensions were identified based on a review of the following items:

- Topographic contours
- Existing servicing limits
- Developed lots serviced by independent systems (wells and septic systems) that could potentially be serviced by the public network
- Need for fire hydrants in the areas north of Coleman
- Confirmed future development
- Potential future development

3.1 METHODOLOGY

The following data were collected, assembled and analyzed:

- Utility components of existing area structure plans
- 2008 Water and Wastewater Master Plans
- 2007 Ten Year Infrastructure Plan
- Base mapping and topographic elevation data
- GIS files and databases including existing utility system layers, land use zoning layers, legal parcel mapping and digital imagery
- New / proposed infrastructure as-built drawings
- Site survey identifying developed and undeveloped road allowances

For report organizational purposes, the study area was broken down into Sub-Areas 1 through 8 as shown in **Figure 1**.

The potential strategies put forth in this report are conceptual.

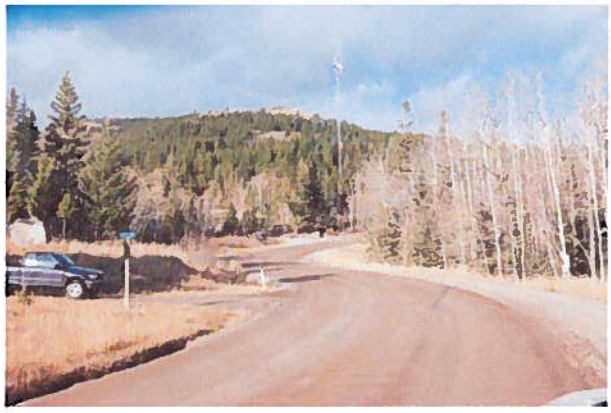
To help ensure proper pressures and flow rates, more detailed analysis and design will be required prior to development occurring in order to correctly size and locate the reservoir, booster pumps, pressure reduction valves, water and wastewater pipes and wells (based on desired lot layout).

Similarly, to help ensure proper grades and roadway drainage systems, more detailed analysis and design will be required prior to development occurring in order to correctly define roadway profiles, cross sectional elements, and right of way requirements.

3.2 EXISTING CONDITIONS AND POTENTIAL SERVICING STRATEGY

The guiding principles used in determining where transportation, water and wastewater infrastructure could potentially be extended as part of a servicing strategy, include the following rationale:

- The provision of wastewater servicing presents the opportunity for larger lots (their current large size a function of an Alberta Environment and Sustainable Resources Development (AESRD) requirement to permit the use of septic systems) to be subdivided thereby increasing density. Increased density creates (a) more efficient use of the land, and (b) increased revenue to help maintain the systems.



- The provision of water servicing extends fire protection coverage and has the added benefit of being more desirable and reliable than the use of wells and/or cisterns.

- Access to further development can be provided while still achieving realistic roadway grades

The extent of the existing transportation, water and wastewater infrastructure are shown in **Figure 7**. Cost estimates for the provision of future infrastructure are outside of the scope of this study. In the event municipal council determined that this servicing strategy should be pursued, such cost estimates would need to be determined at the more detailed levels of development. Such a strategy is depicted in **Figure 8**.

The reader is directed to the legend in **Figure 8** in order to interpret the line-types in the images shown below.

3.2.1 SUB-AREA 1

3.2.1.1 Water

Sub-Area 1 is currently undeveloped with no existing water or wastewater infrastructure. The development sequence in the Nez Perce ASP is proposed to proceed from south to north.

Water supply to this large area is described in detail in the ASP. It will initially (Phase 1 of the development) be provided via a connection to the municipality's existing water line on 17th Avenue at 71st Street in West Coleman. A new line would be constructed along the development's roadways from a booster pump which is proposed between 19th Avenue and the highway to provide the pressure to the grouped country residential lots.

Further development of the area (Phase 2) would involve the installation of a second booster pump to provide pressure to the middle section of the proposed development. A new line would be constructed along the second phase of the development's roadways from this second booster pump to provide the pressure to the proposed grouped country residential lots. This second booster pump is currently proposed at a point along the AltaLink power line transmission corridor which is the boundary between the Nez Perce's phases 1 and 2. Coincident with this corridor is an option for servicing the community of Carbondale from the Coleman system. This option (not included in the Nez Perce ASP) would involve a connection to the municipality's existing water line on 76th Street, north of 29th Avenue and the construction of a new line from this point along the transmission line corridor westward to 23 Avenue / 63rd Street north of the grouped country residential lots in Carbondale. This option is also based upon there being a new reservoir for north Coleman at a higher elevation.

The northernmost section of the Nez Perce development (Phase 3) could involve either an extension of the water main or the use of wells. The feasibility of these options will need to be

determined at the time of development. The option of extending the water main would, similar to the option mentioned above, require the construction of a new water reservoir at a high enough elevation to provide this section with adequate pressure. As noted in the Nez Perce ASP, if water wells are necessary, a hydrogeological investigation is recommended at the subdivision stage.

3.2.1.2 Wastewater

According to the Nez Perce ASP, wastewater infrastructure in this area is planned to follow the water lines to "a portion of the ASP area". This is assumed to mean where it is deemed feasible and economical. Private sewage septic tank and drainage field systems would serve those areas where wastewater infrastructure was not available.

3.2.1.3 Transportation

As per the Nez Perce ASP, roadways in this Sub-Area generally follow contours which achieve grades at or below 12% based on now outdated engineering standard and are shown in **Figure 9**. It should be noted that this 12% grade is based on outdated Municipal engineering standards. Current maximum grades are 10%. A review of the proposed roadways in this ASP may be warranted. A short extension of a future roadway from the southern boundary of the NW 17-8-4-5 quarter section to the quarter section to the east (NE 17-8-4-5) would permit a small area to be developed in Sub-Area 2 adjacent to the Nez Perce Creek valley.

3.2.2 SUB-AREA 2

3.2.2.1 Water

This section of land is currently undeveloped and has no existing water or wastewater infrastructure. It represents the highest elevations (up to 1685 m) and steepest grades within the study area. This section is included in the study area for its potential as the location for a new water reservoir and associated supply and distribution lines. These would service both the northern sections of the Nez Perce ASP lands as well as currently un-serviced areas to the east (Sub-Areas 6, 7 and 8). They would also serve to increase the rest of the municipality's existing system pressure (including a potential future connection to Carbondale).

Water could be pumped up to this new reservoir from a new booster pump adjacent to the existing reservoir in Sub-Area 3. Construction of the new water lines to the south west and south east would distribute the water to the service areas.

3.2.2.2 Wastewater

Not applicable.

3.2.2.3 Transportation

Not applicable.

3.2.3 SUB-AREA 3

3.2.3.1 Water

This section of land contains the existing reservoir. Since the Sub-Area is predominantly crown land, no development is anticipated here. There is however potential for a water line extension from a new booster pump adjacent to the existing reservoir to a new reservoir adjacent to Sub-Area 2, as mentioned above.

3.2.3.2 Wastewater

Not applicable.

3.2.3.3 Transportation

Not applicable.

3.2.4 SUB-AREA 4

3.2.4.1 Water

Water and wastewater servicing are currently available in this Sub-Area for the Kananaskis Wilds and Bowie developments. The proposed water lines in this section are primarily intended to serve the Sawback Ridge development. Other than these, we have identified two potential system extensions in this Sub-Area.

First, should the municipality choose to provide municipal water to the Capron Estates development (currently on independent systems) from a future higher elevation reservoir, a new line could be built along the Hwy 40 right of way from a connection at the Kananaskis Wilds access into the Capron Estates entrance. Second, in order to increase system performance and improve water quality, a looping connection is

possible from the south end of the future Sawback Ridge development to both the existing and potential system extensions in Sub-Area 5.

3.2.4.2 Wastewater

There are existing wastewater lines in the Kananaskis Wilds development as well as in the 27A Avenue right of way in the Bowie development. The potential wastewater lines in this section are primarily those proposed as part of the Sawback Ridge development. Two additional potential system extensions are identified for the Sub-Area.

Servicing the lot west of the repeater site and north of Sub-Area 4 would be possible via a connection to the Sawback Ridge system to the south. A logical connection point between systems would be between the Sawback Ridge development and the existing and potential system extensions to the south in Sub-Area 5 via the Sunny View Estates development.

Given that the developable areas in the south part of the Sub-Area are potentially capable of being served by ground wells, septic tanks and field systems, there is no urgency seen to expanding these services at this time. Service expansion should only be considered as a long term strategy with low priority and only if a sustainable balance can be achieved between revenue and maintenance costs.

3.2.4.3 Transportation

The Sawback Ridge ASP proposes an internal network of roads that follows contours and achieves grades at or below 10%. The ownership and maintenance of the roads will be the responsibility of a condominium corporation. If not already achieved, the detailed design of the intersection of the internal roadway system and Hwy 40 will require the approval of Alberta Transportation.

Alberta Transportation has advised that once the area becomes fully built out and traffic volumes increase, drainage improvements will be required for deficiencies caused by the Kananaskis Wilds development in the Hwy 40 right of way.

3.2.5 SUB-AREA 5

3.2.5.1 Water / Wastewater

The prospective water and wastewater servicing strategy in this area involves extending lines to service the potentially developable areas as well as to create looping which will improve overall system performance and water quality. Due to

the number of segments of new pipe in the conceptual servicing strategy in this area, the graphic representation as seen in **Figure 8** best summarizes the potential new pipes and connections to the existing network in this area.

3.2.5.2 Transportation

In order to improve direct access and egress in general and provide for the potential development of currently vacant blocks of land, several additional roadways are identified in **Figure 9**.

3.2.6 SUB-AREA 6

3.2.6.1 Water

Much of the south half of Sub-Area 6 is currently serviced with municipal piped systems. The exception to this are the lots in the north east quadrant and a sector at the south end of the Sub-Area between the Iron Stone development and the Servus Credit Union. Water needs in the Capron Estates development are met by wells. The majority of the Woodhaven development is serviced by a municipal water line.

A potential water servicing strategy within this Sub-Area includes servicing the Capron Estates development via extensions of the Kananaskis Wilds and Sawback Ridge pipe networks as well as filling the gaps in the Wood Haven water pipe network. Potential water pipe alignments generally follow roadway centrelines in both developments. Servicing the Wood Haven development could involve a connection to the existing Aspen Creek network via the construction of new pipe from the Aspen Creek cul-de-sac east toward 89th Street. Here, the waterline would tee and turn (a) south to proceed down 89th Street where it would connect to the existing system, and (b) continue eastward another 220 m at which point it could turn north into an area of potential development in the south east quadrant of SE 16-8-4-5 (Capron).

Another opportunity to fill in a gap in the water system presents itself east of the Iron Stone development. The gap starts at the intersection of Hwy 3 and 89th Street and proceeds for approximately 180 m along 89th Street. Filling in this gap creates looping which would increase system performance and water quality.

Given that the developed areas in Sub-Area 6 have historically been, and continue to be, served by ground wells, there is no urgency seen to expanding these services at this time. Service expansion should only be considered as a long term strategy with low priority and only if a sustainable balance can be achieved between revenue and maintenance costs.

3.2.6.2 Wastewater

Facilities currently serviced by the municipal wastewater sewer system in this area are the Iron Stone development, the arena and the high school. The remainders of the Sub-Area's wastewater needs for the grouped country residential lots are met by septic fields and tanks.

Potential wastewater pipe alignments would generally follow roadway centrelines in the Capron and Wood Haven developments. Connections between the existing network and un-serviced areas are possible for the Aspen Creek development through the road allowance north of Sunny View Estates; for the Capron Estates development through the AltaLink transmission corridor, the Tiegen lot 5 and the Sunny View Estates development; for the West Haven development, at the Hwy 3 and 89th Street intersection.

Given that the developed areas in the Sub-Area have historically been, and continue to be, served by septic tanks and field systems, there is no urgency seen to expanding these services at this time. Service expansion should only be considered as a long term strategy with low priority and only if a sustainable balance can be achieved between revenue and maintenance costs.

Potential expansion of the recreation complex, the high school, the Ironstone housing development and the commercial developments can be accommodated by existing municipal services.

3.2.6.3 Transportation

Three locations have been identified for potential new roadways in Sub-Area 6. These are shown in **Figure 9** and are described as follows:

1. A short segment of roadway which could provide access into a small remaining developable area of land north of the AltaLink corridor in the northern part of the Sub-Area immediately south of Capron Estates.

2. In order to reduce the number of conflict points on Hwy 3, the municipality, in conjunction with Stantec, has begun to construct an alternate access to the high school via a curvilinear extension of 19th Avenue. Once internal site and roadway connections are made, the existing direct access from Hwy 3 will be closed.

3. An extension of 24th Avenue south of 89th Street would provide connectivity into Sub-Area 7. Depending on the side slopes encountered along this alignment, the road allowance width may exceed the 20.0 m standard in some places.

3.2.7 SUB-AREAS 7 AND 8

3.2.7.1 Water/Wastewater

No piped water or wastewater services are currently in this Sub-Area. In the absence of any known plans for this area, some highly conceptual utility alignments have been developed to show what could potentially develop on this site based on the topography.

Due to the nature and orientation of the potential segments of new piped systems in the conceptual servicing strategy for this area, the graphic representation as seen in **Figure 8** best summarizes the potential new pipes and connections to the existing network in this area.

Various options exist for water delivery to these two sub-area. While sub-area 8 is currently within the service area of the existing reservoir, its distance from the reservoir would likely result in a significant amount of pipe friction which may or may not result in adequate flows for the proposed land uses in the sub-areas. Detailed design and water modeling would be required to determine the requirements of delivering the appropriate flows and pressures to this sub-area from the existing reservoir.

At the south east corner of Sub-Area 6, a new booster pump could be constructed at the Blairmore/Coleman interconnect alignment on the north side of Hwy 3 to provide flows / pressure to the potential development in Sub-Areas 7 and 8. This booster pump would remain in use until such time as a new reservoir were constructed near Sub-Area 2 and connected to this Sub-Area.

A future connection to the Blairmore golf course is a possibility from the south end of Sub-Area 8.

Given that the developable areas in the south part of the Sub-Area are potentially capable of being served by ground wells, septic tanks and field systems, there is no urgency seen to expanding these services at this time. Service expansion should only be considered as a long term strategy with low priority and only if a sustainable balance can be achieved between revenue and maintenance costs.

3.2.7.2 Transportation

Depending on the scope of any proposed developments in Sub-Areas 7 or 8, a full scale TIA will likely be required from Alberta Transportation. Alberta Transportation will also require that any access proposals meet their access management guidelines and geometric requirements. Specifically, a Type IV intersection has been identified as the appropriate treatment of an intersection providing access to this Sub-Area. It will need to be properly spaced (minimum 400 m) from both the future Hwy 3X interchange near the Tim Horton's site in West Blairmore and the existing 89th Street intersection.

In addition to these provincial requirements, any proposed developments in the Sub-Area will need to meet with the approval of the Municipality. As the sub-division and development authority for the area, the Municipality should require detailed planning documents prior to any approvals.

3.2.8 FUTURE RESERVOIR

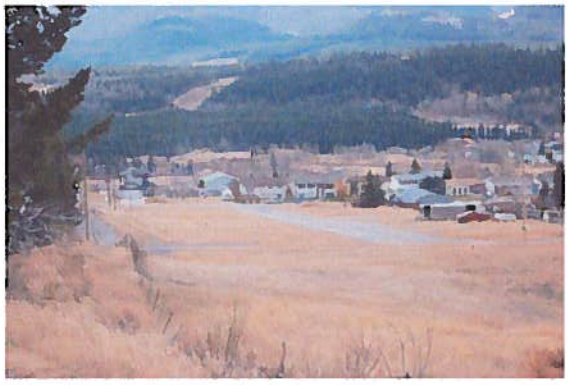
Many of the strategies identified in Section 3.2 are reliant upon the construction of a new water reservoir at a higher elevation than the current one. For the purposes of this report, the conceptual location of this reservoir and its fill line are shown and understood to be at the conceptual locations identified in the 2008 Water Distribution Master Plan.

Additional feasibility studies, analysis and design are required prior to identifying potential locations for this infrastructure including its associated distribution lines.

4.0 CONCEPT PLAN

4.1 OBJECTIVES AND STRATEGY

4.1.1 TRANSPORTATION AND SERVICING OBJECTIVES



- Utilize existing and un-used servicing capacity and support those potential development areas that are closest to existing services and are within built up areas of the community.
- Extension of services to existing and any proposed grouped country residential should only be considered as a long term possibility when and if conditions are warranted.
- Provide opportunities for improved access and internal circulation in developed areas and provide access to create opportunities to further development in both developed and undeveloped areas.

4.1.2 TRANSPORTATION AND SERVICING STRATEGY

- Existing water and waste water infrastructure in Sub-Area 5 offers the most attractive opportunity to extend services and create development possibilities. Some road improvements in the area are also necessary.
- Less attractive, but a potential long term strategy, is to extend services to developed grouped country residential areas e.g. Woodhaven, Aspen Creek, Capron Estates (Sub-Area 6), the approved Sawback Ridge project, and the Bowie Subdivision south of, and adjacent to Kananaskis Wilds (Sub-Area 5). The majority of Woodhaven, all of Aspen Creek and all of the Bowie Subdivision presently have piped water. Capron Estates does not. A potential servicing strategy is offered in the Concept Plan. The extension of these services should not be viewed as a priority but would however create the potential for further land subdivision and higher densities.
- The Nez Perce ASP site (Sub-Area 1) and the undeveloped sectors of the Study area (Sub-Areas 2, 3, 7 and 8) remain the servicing responsibility of the owners/land developers and will need to be defined when detailed planning and servicing documents (e.g. conceptual plans) are prepared. A potential servicing strategy and a roadway network are set out in the Concept Plan.

- Where feasible, open currently undeveloped road allowances. Similarly, where feasible, construct roadways that fit the existing topography and result in acceptable grades (maximum of 10% as per the 2006 Engineering and Development Standards) to support potential land development as identified in the Concept Plan.

4.1.3 TRANSPORTATION AND SERVICING POLICIES

4.1.3.1 Internal roadways in currently undeveloped areas will meet the latest design criteria for roadways defined in the 2006 MCNP Engineering and Development Standards and be constructed by the developer to Municipal standards and should either be dedicated as public roadways or fall under the ownership of bare land condominium associations.

4.1.3.2 Adequately sized bulbing will be provided at the end of cul-de-sacs to accommodate safe fire truck turning movements.

4.1.3.3 All access to or from country residential lots will be to or from internal roadways. No direct residential driveway access shall be allowed onto Hwy 3.

4.1.3.4 Internal roadway intersections with Hwy 3 shall be constructed to the satisfaction of Alberta Transportation.

4.1.3.5 Development of country residential lots will generally require suitable piped water supply. Alternatively, individual water wells may be necessary where piped water is deemed impractical. All necessary AESRD permits, approvals and licenses will be obtained for the water system as a condition of subdivision approval. Similar approvals, permits and licenses will be required from AESRD for any proposed stormwater management systems.

4.1.3.6 The design of piped community water systems will be subject to approval by the Municipality.

4.1.3.7 Prior to Tentative Plan approval for country residential lots, a stormwater management plan based on "Best Management Practices", acceptable to the Municipality, will be prepared by a Qualified Professional.

4.1.3.8 Prior to Tentative Plan approval for country residential lots, a geotechnical analysis, acceptable to the Municipality, will be prepared by a Qualified Professional.

4.1.3.9 An engineered tank and field system that meets the provincial private sewage disposal system regulations will be the minimum requirement for septic treatment.

4.1.3.10 Representative percolation tests shall be provided by the developer prior to Tentative Plan approval.

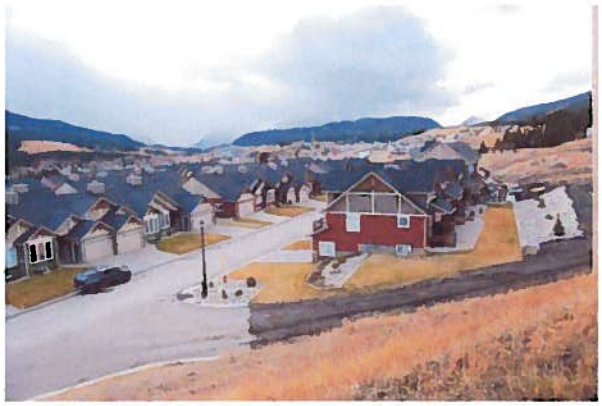
4.1.3.11 For lots intended to depend on well water sources, water well tests shall be provided by the developer prior to Tentative Plan approval.

4.1.3.12 Prior to Tentative Plan approval, the developer shall provide details regarding garbage disposal, fire protection, school bus service, location, width and turning radius of existing and proposed roadways, access and egress to the proposed development, a statement of all the intended land uses for the development site, types and location of fencing proposed for the development and the environmental impacts on lands and wildlife in the immediate area.

4.1.3.13 Roadways in condominium developments should be developed to the 2006 Municipal Engineering and Development standards.

4.1.3.14 Design variances are subject to the review and approval of the Municipality.

4.1.4 LAND USE AND DEVELOPMENT OBJECTIVES



- Residential development should respond to the shortfall and identified need for multi-family units, rental units, affordable housing, and seniors' housing.
- Commercial land sites should be provided to meet noted shortfalls and anticipated market demand
- The highest priority areas for development should be assigned to those areas that are closest to existing servicing and where extension of services is least burdensome to the municipality.
- Areas of excessive topography (> 25% slopes) should generally be avoided for development.
- Open spaces and trail systems should be integrated with new and existing communities.
- The natural and historic environment should be protected, including forest areas, endangered or threatened species, water courses and important vistas.

- Enhance the mountain environment theme

- Recognize the need for protecting buildings from wildfire as well as limiting the spread of wildfires. To this end, the FireSmart regulations as set out in Schedule 14 of the Municipality's LUB shall apply.

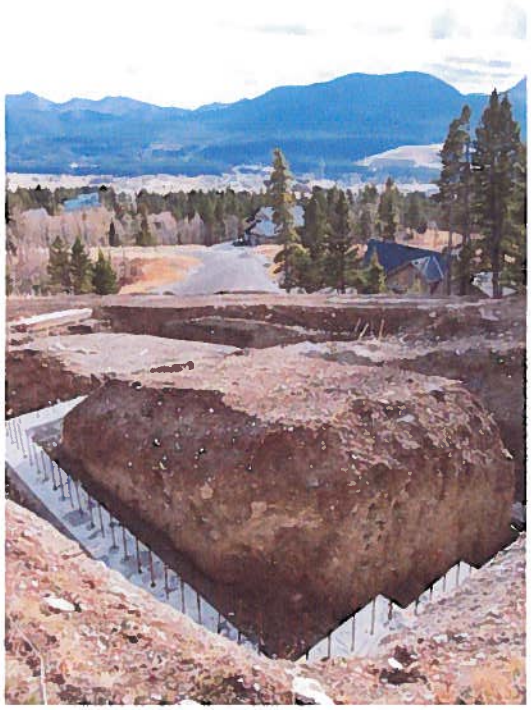
4.1.5 LAND USE AND DEVELOPMENT STRATEGY

- Undeveloped land in Sub-Area 5 offers excellent opportunity to meet demand for multi-family, rental units, seniors' housing as well as single family uses.

- Locational and visibility elements create commercial land opportunities adjacent to Highway 3. If market conditions are in place, Sub-Area 8 is a logical candidate to meet this opportunity.

- Watercourses offer opportunity to create interesting pathways and connectors between developed and developing areas. The Nez Perce Creek acts as one example. Other possibilities exist in Sub-Areas 7 and 8.

- Potential development areas – particularly grouped country residential projects – require appropriate roadway access and connections to existing networks. Design for such networks must include looped systems to ensure multiple access points for emergency vehicles.



- Provide site design and architectural controls

4.1.6 LAND USE AND DEVELOPMENT POLICIES

4.1.6.1 The minimum lot size shall be as determined by the Municipal Planning Commission

4.1.6.2 Lot layout shall accommodate efficient water servicing and the least amount of roadway construction.

4.1.6.3 Site grading should be minimized to retain the existing south-facing slope topography and minimize the removal of mature forest canopy. Wherever possible, site grading should be limited to roadways, house envelopes, septic disposal fields, driveways or stormwater retention facilities.

4.1.6.4 For maximum solar exposure, roadway orientation and the respective lot arrangements should, where possible, provide south facing opportunities.

4.1.6.5 For potential solar panel installation, roof pitches should be considerate, where possible, of solar panel installation requirements.

4.1.7 DEVELOPMENT SEQUENCE

Development should be phased in a logical and efficient manner to minimize disruption to the land, provide for logical water service extensions, respond to market demand, and conform to the growth objectives of the Municipality.

The highest priority for development is assigned to Sub-Area 5 although it is understood that the market will be the ultimate stimulant for any activity in the area. Sub-Areas 1, 2, 7, 8 and portions of Sub-Area 6 and 4 represent long term development possibilities. Sub-Area 3 is not recommended for future development. Market conditions for possible commercial use could prompt earlier development in Sub-Area 8.

4.2 CONCEPT PLAN AND SERVICING STRATEGY

With the exception of the approved ASPs (Nez Perce, Sawback Ridge), there are currently no plans to develop many parts of the study area. This ASP provides a concept plan of what potential land uses could be. These potential land uses have also been provided with a conceptual servicing plan as identified in section 3.0 above.

The land use pattern and servicing strategy presented here is intended to serve as a general scenario to guide and lend direction in the preparation of detailed conceptual plans[2]. Market conditions will determine if and when any development areas as depicted in this ASP proceed.

Discussion of the potential land use pattern for the study area is outlined below and is identified in **Figure 9**.

[2] No commitment is made or implied by the Municipality of Crowsnest Pass to approve the land use concept as presented herein or to provide the services or improvements as presented in this Study.

4.2.1 SUB-AREA 1

The Nez Perce Area Structure Plan continues to form the basis of the land use concept for Sub-Area 1. Country residential parcels on contiguous sites slopes of less than 15% are the principal proposed land use. As identified in the Nez Perce ASP, a contour- based roadway system with maximum 12% gradients will serve these sites, while a municipal water system augmented by booster stations and wells, where needed, will provide water to this future community. Phasing of development will be based on market conditions and is proposed to move from south to north.

While the Nez Perce ASP provides for an estimated population of 400-600 when the project is completely built out (no changes are proposed to these estimates in this ASP), the proximity to existing municipal water services at the southern end of the plan area i.e. via connection to the existing water line at 17th Ave at 71st St., offers opportunity to explore higher density options in this area. Commencement of development in the southern sector of the Nez Perce ASP would remain in keeping with the phasing program as proposed in this document.

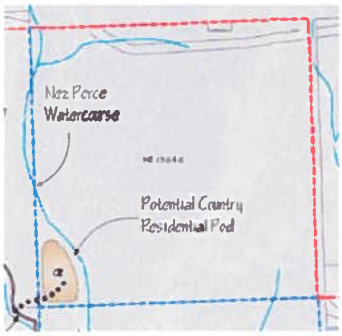
A short extension of a future roadway from the southern boundary of the NW 17-8-4-5 to the quarter section to the east (NE 17-8-4-5) would permit a small area to be developed adjacent to the Nez Perce Creek valley. The ownership of this quarter section is part of the overall McGillivray Development title.

Given the length of time that has passed since this ASP was approved and the fact that the Municipal Engineering and Development Standards have evolved in the intervening period, it may be worth reviewing the Nez Perce Plan.

The development priority of this Sub-Area is regarded as low and is dependent on market conditions.

4.2.2 SUB-AREA 2

This Sub-Area is limited by its steep topography. As such, very little potential development is feasible. The following has been identified as potential for development:



- Exploiting a small potential development node of approximately 4 acres in the southwest corner of the quarter section. Assuming that lot sizes would be similar to those in the adjacent Nez Perce ASP (1.0 to 3.0 acres), between 1 and 4 lots could be created. An estimated maximum population of 16 residents could be generated by this small development.

- Considering an extension of the Coal Miner's trail further north along the Nez Perce valley. The feasibility of this should be explored with the Crowsnest Pass Historic Society.

The priority of this development area is low. Adjacent development demand will determine the possible realization of any of the servicing and land-use recommendations made for this Sub-Area.

4.2.3 SUB-AREA 3

In view of the *"protective notation"* assigned to the lands north of the AltaLink transmission line, this predominantly Crown Land site has been assigned a potential conservation area. Save for existing uses - water reservoir, utility lines, Coal Miner's Trail - no further development is recommended unless the *"protective notation"* is removed.

Land west of the Crown ownership may be considered provided amendments are made to the Nez Perce ASP to include those properties. The land south of the AltaLink transmission line continues to be used for urban residential development.

4.2.4 SUB-AREA 4

This Sub-Area is currently partially developed for urban residential and grouped country residential lots.

The existing grouped country residential parcels in this Sub-Area are not recommended for uses other than country residential. Save for the population growth that will be generated by the currently proposed developments, no additional population estimates are provided for this Sub-Area.

4.2.5 SUB-AREA 5

Sub-Area 5 provides the highest potential for development in the study area, offering opportunities for higher density urban development, a wide range of accommodation types (seniors, renters, affordable housing, etc.) and utilizing services that are adjacent, or nearly adjacent, to these potential development sites.

The Concept Plan identifies several blocks in Sub-Area 5 for either single family or multifamily uses, or in some cases combinations of these. To establish density and population estimates, this report has made an assumption that the housing forms would be a combination of single detached units, 4-plexes and row houses.

Parcel sizes were based on dimensions as set out in the R-1A and R-2A Districts of the municipality's Land Use By-law. Although an assumption has been made on the types of residential uses that might develop on these residential blocks, other types of residential forms (semi- detached, apartments 5 stories or higher, seniors housing, etc.) or combinations thereof are equally valid as development possibilities. As in the other Sub-Areas of this ASP, market conditions will determine the ultimate housing opportunities and timing of development and servicing provision in Sub-Area 5.

Because StatsCan offered only one generic "average number of persons per household" for Crowsnest Pass i.e. 2.9, a more realistic indicator of resident occupation numbers - the Alberta "persons per household" (pph) averages - was utilized for row housing (2.4), 4-plex (1.7) and single family homes (2.9).

In assessing the possibilities for development in Sub-area 5, the municipality should review the overall design of the blocks including the recently approved, but not yet developed site, presently under the ownership of Mr. Remus. Such a review would help evaluate the most economical and logical land use and servicing pattern for the entire sub area.

Depending on which combination of housing forms are utilized, a potential population of approximately 590 - 750 could be accommodated in the Sub-area.

4.2.6 SUB-AREA 6

This Sub-Area is largely developed for grouped country residential parcels.

The Concept Plan shows a small developable pod for grouped country residential parcels, south of the Capron Estates development.

Based on the Grouped Country Residential minimum parcel sizes, this area could accommodate 2 to 4 parcels providing accommodation for approximately 16 new residents.

It should be noted that Sub-area 6 also includes municipal property that presently accommodates the Arena/Curling Rink facilities. Only a part of the parcel is developed. As a result, there is opportunity for additional uses on the remaining vacant portion. The Municipality may wish to explore other possibilities for this property in order to maximize its full potential.

4.2.7 SUB-AREA 7

At the time of preparation of this study, no specific interest has been expressed by the present property owner to develop Sub-Area 7. Consequently, the concept identified by Stantec for the area attempts merely to define a possible long term arrangement of plausible land uses. The principles used to develop this concept were:

- Given similar uses in the immediate area, distance to amenities and the low probability of extending municipal services to the area, grouped country residential use is seen as the most logical land use.

- Where possible, watercourses will be preserved and incorporated within open spaces; pathway/trail systems should be incorporated and linked to other existing or potential future systems; and linkages should be made between developed areas and areas with potential development.

- Areas with excessive slopes were excluded as potential development area

The concept plan identifies a number of sites for possible grouped country residential uses. Based on minimum parcel sizes set out by the Land Use Bylaw, 15 parcels could be accommodated within this sub area, generating a potential additional population of 60 residents. Green space has been located on less developable areas. No determination has been made as to whether it qualifies as municipal or environmental reserve.

The concept for Sub-Area 7 is intended only to illustrate a possible planning and servicing scenario and is subject to the preparation of detailed planning and servicing studies as may be required of the land owner / developer by the municipality. Market conditions, will determine if and when any development for this area is warranted.

4.2.8 SUB-AREA 8

At the time of preparation of this study, no specific interest has been expressed by the present property owner to develop Sub-Area 8 except for the possibility of developing highway commercial properties in the southern sector of Sub-Area 8. Consequently, the concept identified by Stantec for the area attempts merely to define a possible long term arrangement of plausible land uses.

The concept identified for the Sub-Area is based on the following principles:

- Given similar uses in the immediate area, distance to amenities and the low probability of extending municipal services to the area, grouped country residential use is seen as a logical land use for northern portions of Sub-Area 8.

- Areas with excessive slope were excluded as potential development areas

- Where possible, watercourses will be preserved and incorporated within open spaces and linkages should be made between developed areas and areas with potential development
- Lands closer to potential amenity sites and access to Highway 3 (south sector of Sub-Area 8) offer possibilities for urban-type residential densities and commercial uses. Sites for these uses are identified in the Concept Plan. While the residential option is not seen as having a high priority for the municipality, particularly given the advantages offered by Sub-Area 5 to accommodate similar uses, it is anticipated that the developer of the site will be guided by market conditions.

The Concept Plan identifies a number of land use categories for this Sub-Area: 3 residential, green space and highway commercial:

1. The grouped country residential area would offer opportunity for approximately 16 parcels, and resulting in a potential population of 66 residents.

2. Approximately 12 acres are allocated to single/multifamily uses. Depending on which option or combination of options is followed, a potential population of 230 and 400 could be accommodated on these sites.

3. Green space areas have been allocated at key locations to serve the needs of the higher population densities.

4. An area for highway commercial is included in the concept plan. The site size (4 acres) is tentative only and warrants further investigation to determine it will adequately serve the short and long term needs of the community.

Since "highway commercial" has been identified as a potential land use in this Sub-Area, additional investigation and Alberta Transportation approval, of an access point onto Highway 3, and spacing requirements from the proposed future Hwy 3X alignment to the east and existing access to the west (89th Street), is also warranted. Market conditions will determine if and when any development for this area is justified.

4.3 RECOMMENDATIONS

In addition to the recommendations set forth in the concept plan, this Study also offers a number of recommendations, both specific and general to the Study, for consideration when future developments are proposed to the municipality:

1. In making applications for major developments e.g. at scales where Area Structure Plans are required, applicants should provide evidence of market analysis demonstrating to the municipality the viability of their respective projects.
2. Prior to considering new grouped country residential proposals on undeveloped or "green" sites, the municipality should be satisfied that a reasonable amount of existing development areas are completed and have housing units on them.

3. All servicing and engineering related components of proposed projects should be reviewed by a qualified engineer acting on behalf of the municipality.

4. The municipality should review the practice of having projects developed as bare land condominiums with a view to ascertaining their long term impact on the municipality.

5. The Municipality should review its offsite servicing standards from time to time to help ensure that they meet the needs of the Municipality and its residents and at the same time do not create a significant impediment to development opportunities.

6. Consideration should be given to reviewing an overall redevelopment strategy for the Coleman area with a priority given to the older parts of the community where services already exist, and where cost savings are likely to be highest.

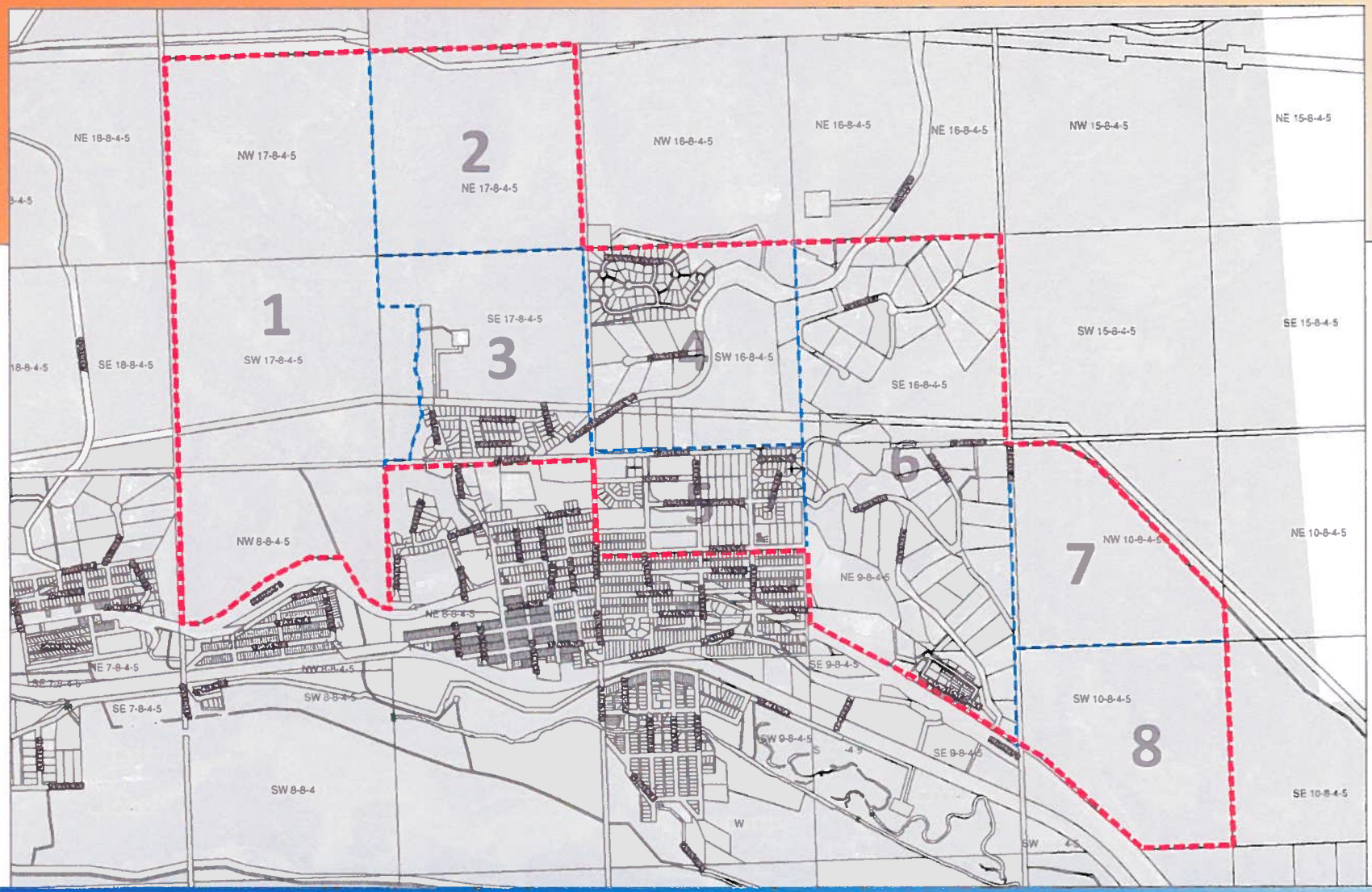
7. The Municipality should develop a policy for private roads.

APPENDIX A

FIGURES

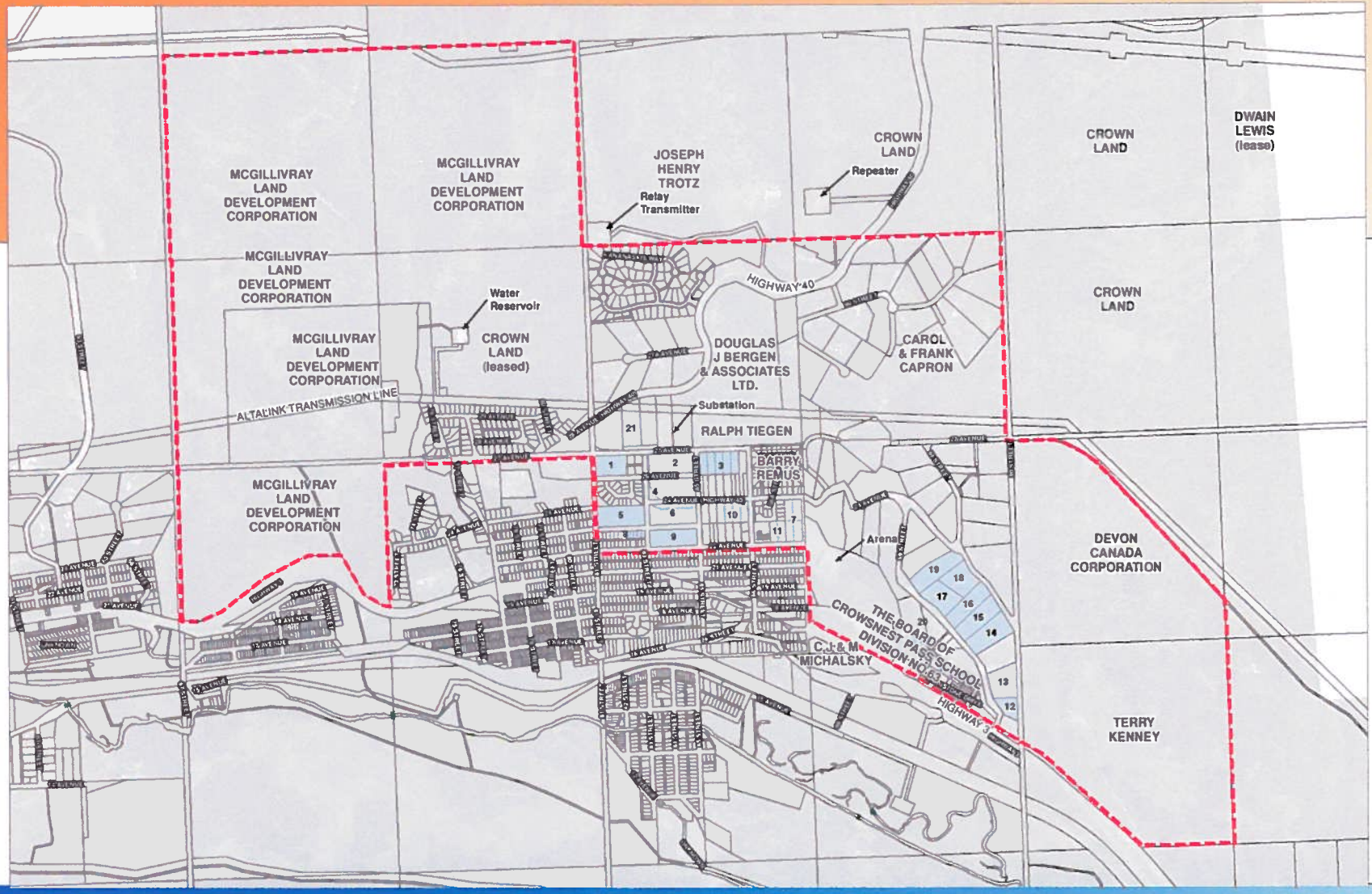
Figure 1

Study Area



Scale - 1:15,000

Figure 2 Principal Land Ownership



Legend

Study Area

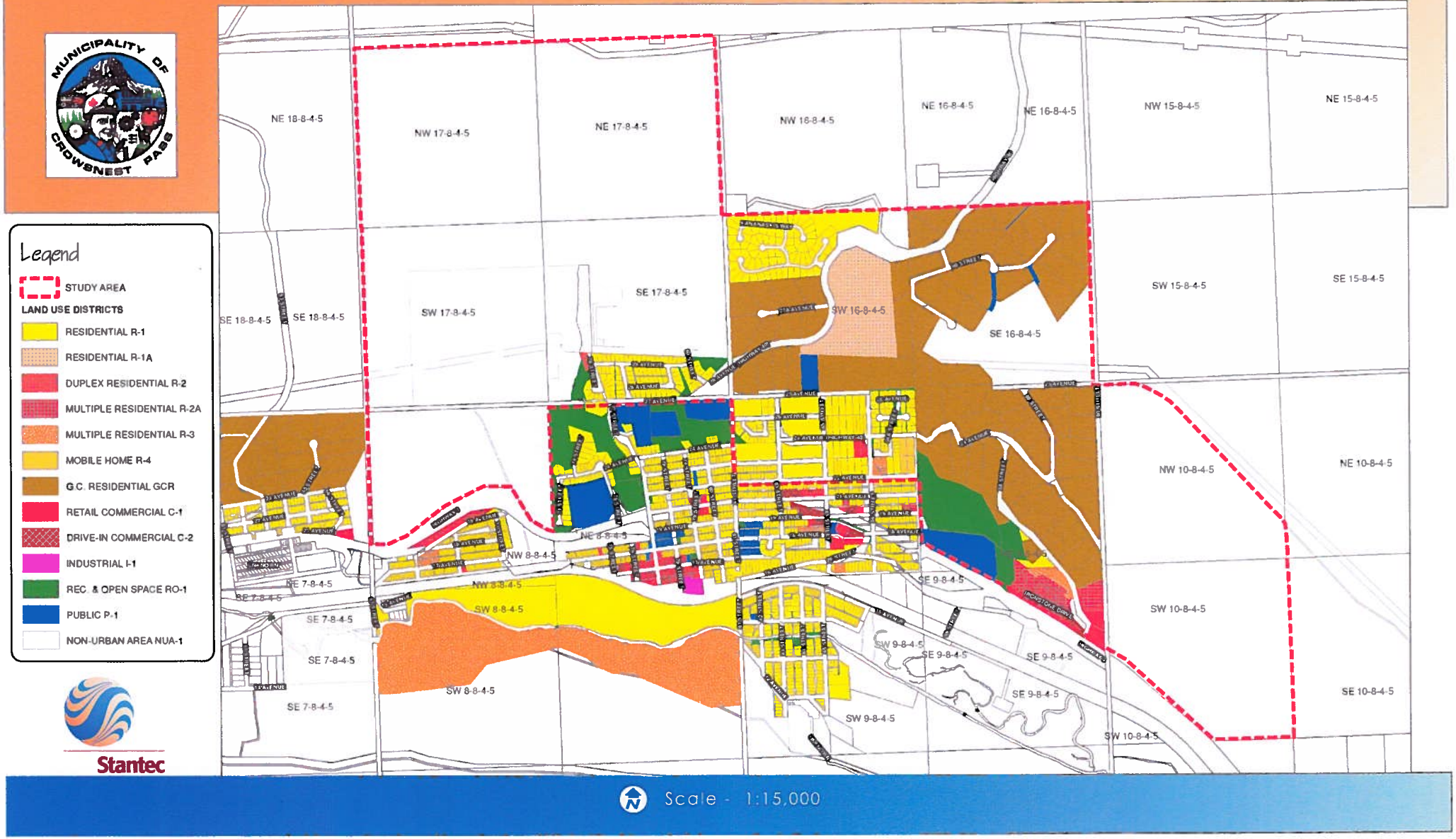
Number	Landowner
1	Charles Townsend
2	Kevin & Danita Bradbury
3	Roy Vare
4	JJ Pipeline Services & consulting Ltd.
5	MCNP
6	MCNP
7	MCNP
8	MCNP
9	Donna Cooke & Dixie Edge
10	Pentacostal Assemblies of Canada
11	Valley View Motel Ltd.
12	MCNP
13	MCNP
14	Botha, A.
15	Gunn, R.
16	Zverina, J.
17	International Geological Consultants Ltd.
18	Bradley, A.
19	Florence, B.
20	Trotz, W.
21	Boebisch, P. & Heilman, B.

Stantec

Scale - 1:15,000

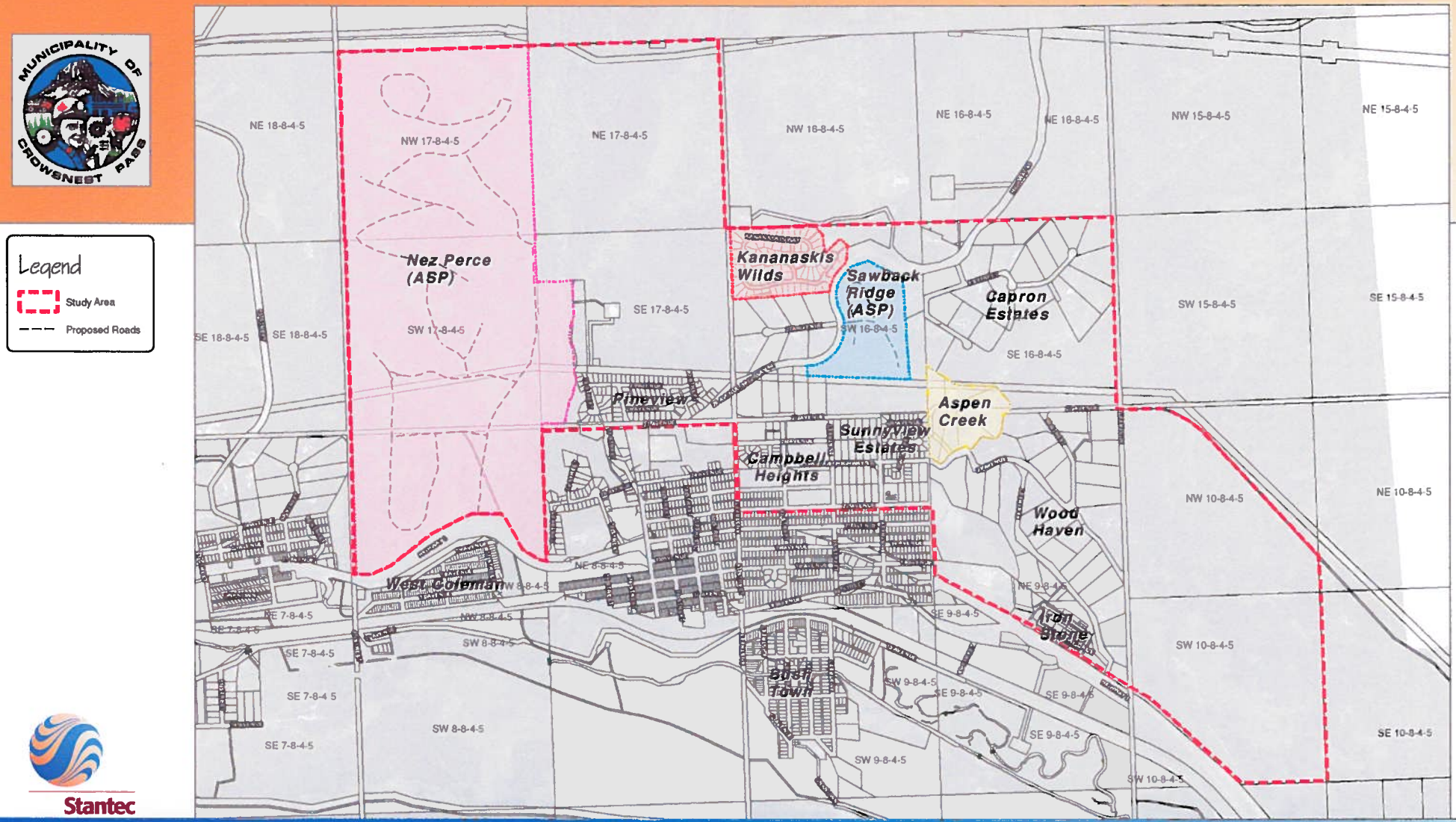
Figure 3

Land Use Districts



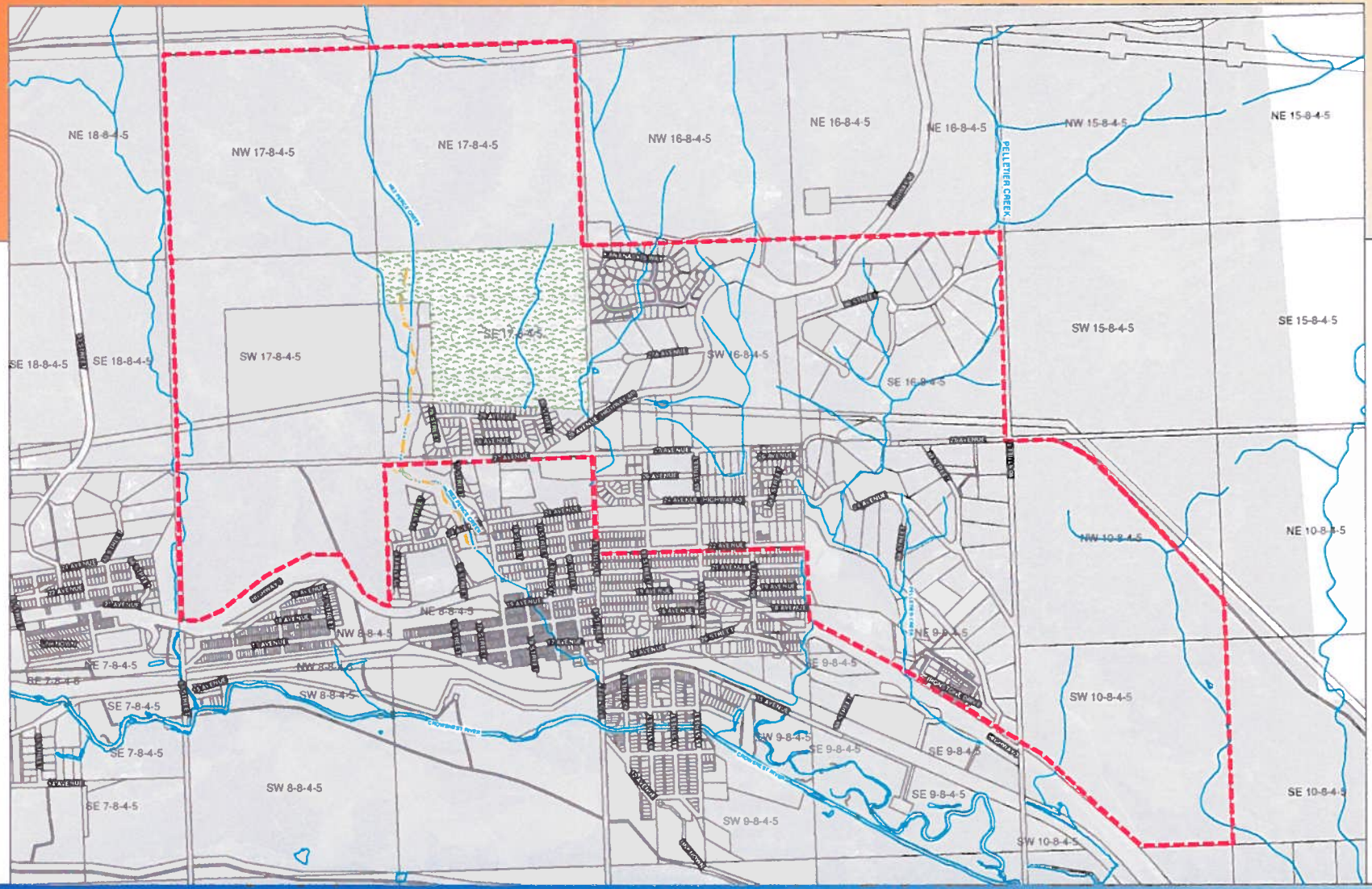
NORTH COLEMAN AREA STRUCTURE PLAN

Figure 4 Existing/Proposed Developments & ASP



NORTH COLEMAN AREA STRUCTURE PLAN

Figure 5 Environmentally Sensitive & Historic Areas



Legend

- Study Area
- Coal Miner's Trail
- Watercourse
- Rough Fescue Grassland

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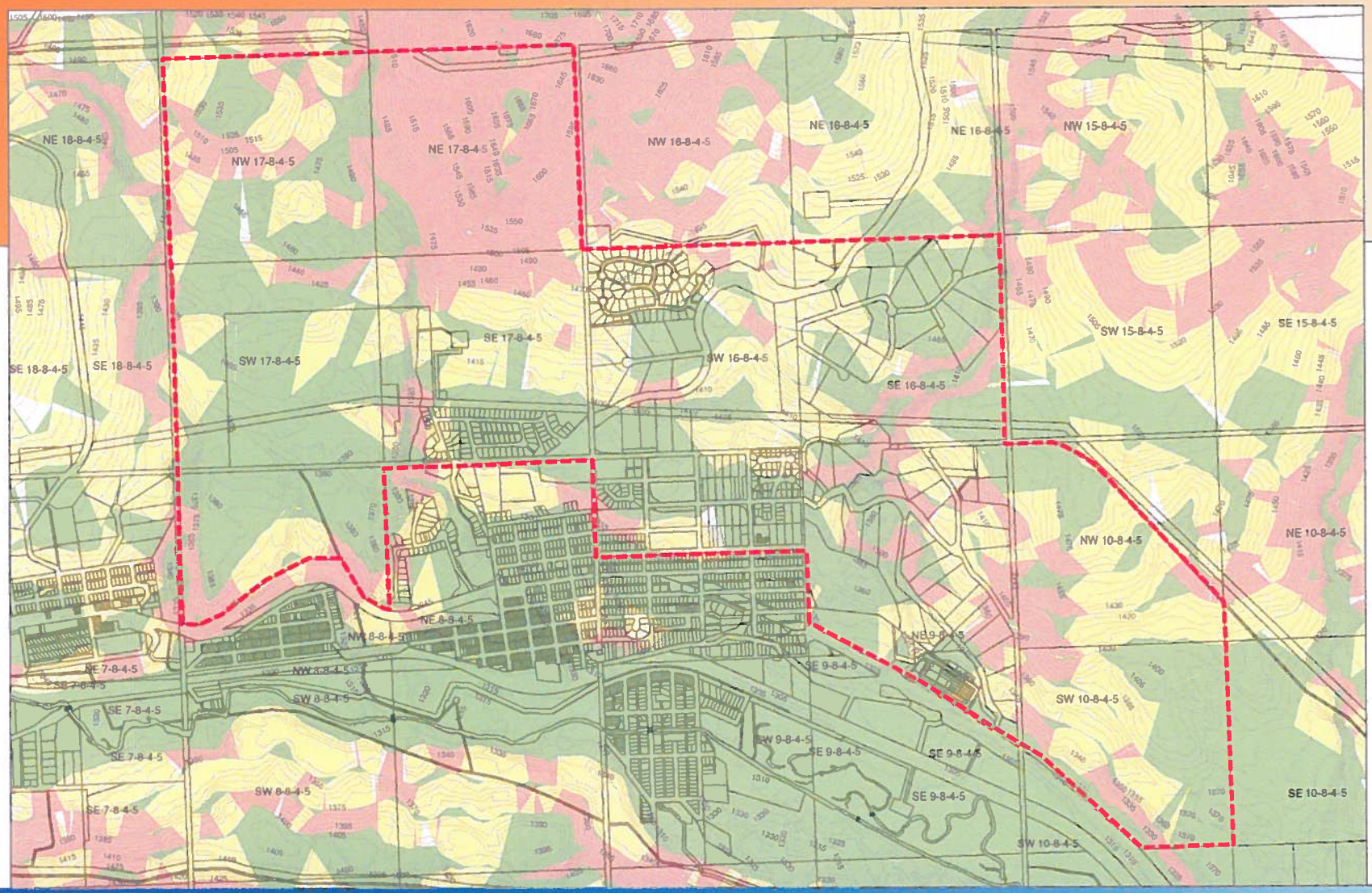
Scale - 1:15,000

Figure 6

Topography



Legend

- Study Area

Slope

- 0% - 12.5%
- 12.6% - 24.9%
- > 25%

*** Note: Contour Interval = 5m ***

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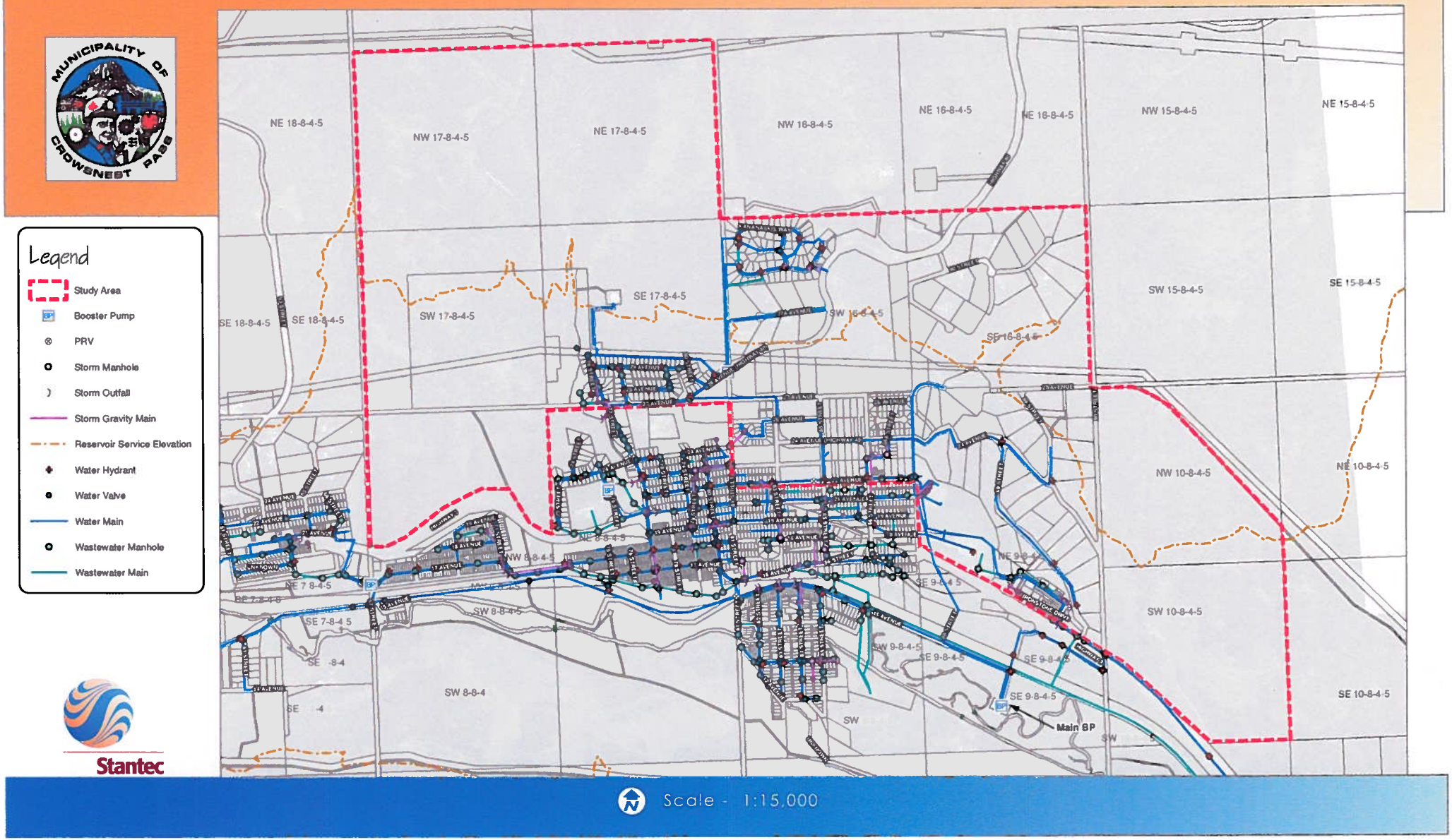
Scale - 1:15,000

Figure 7

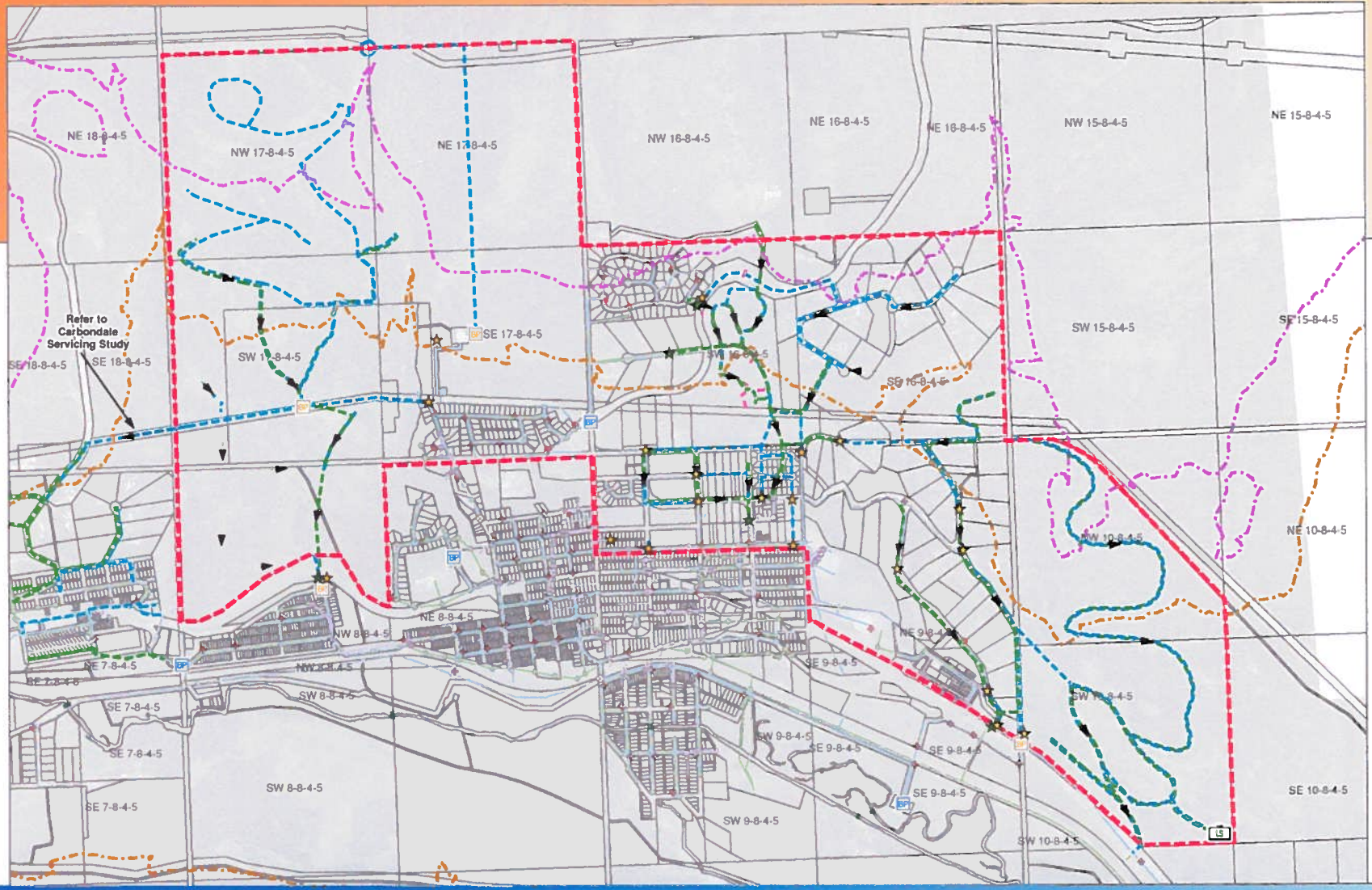
Existing Utilities



NORTH COLEMAN AREA STRUCTURE PLAN

Figure 8

Potential Utilities



Legend

- Tie to Existing Sanitary
- Tie to Existing Water
- Pr. Reservoir Service Elev.
- Ex. Reservoir Service Elev.
- Reservoir - Potential Site
- Existing Booster Pump
- Potential Booster Pump
- Lift Station
- Study Area
- Proposed Wastewater
- Proposed Storm
- Proposed Water
- Storm Manhole
- Storm Outfall
- Storm Gravity Main
- Water Hydrant
- Water Valve
- PRV
- Water Main
- Wastewater Manhole
- Wastewater Main

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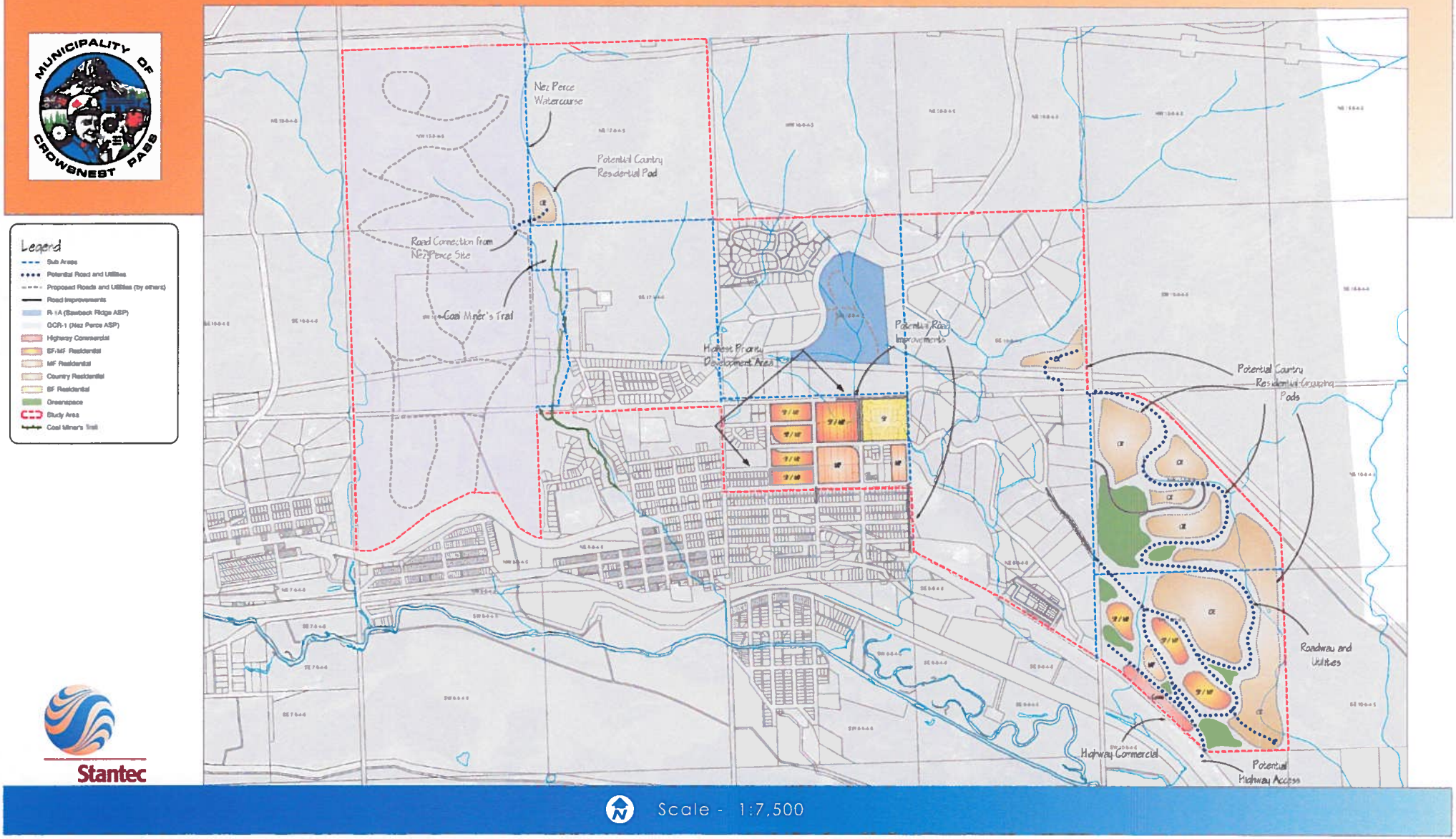
Scale - 1:15,000

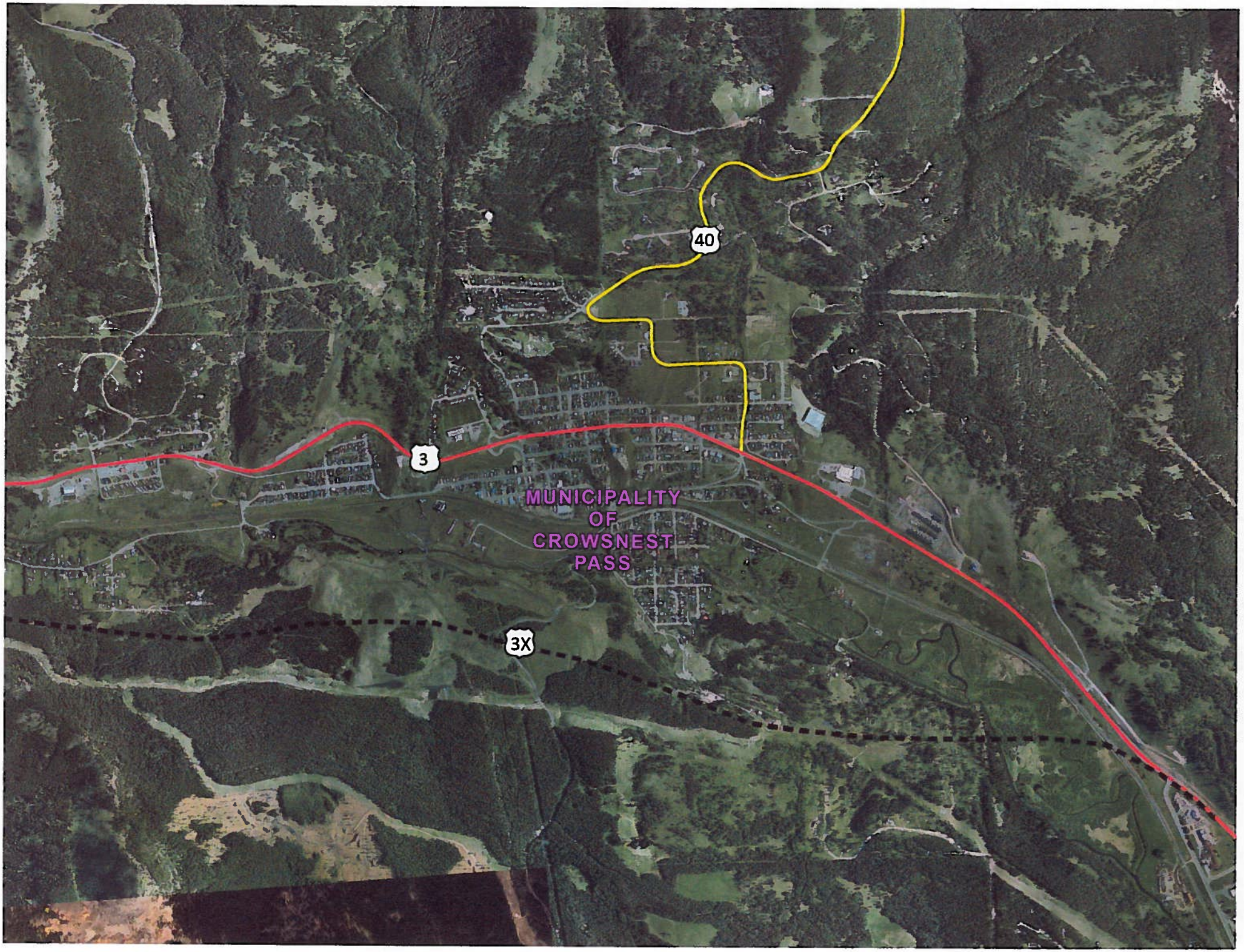
Figure 9

Concept Plan



APPENDIX B

HIGHWAY 3X PROPOSED ALIGNMENT


40
3
MUNICIPALITY
OF
CROWSNEST
PASS
3X